stormwater collection systems for municipalities and stormwater discharges associated with certain industrial activities. Point source dischargers in North Carolina must apply for and obtain a National Pollutant Discharge Elimination System (NPDES) permit. According to 40 CFR Section 122.3, certain discharges are exempt from NPDES permits. Point source discharges are regulated through the NPDES program. Permitted discharges not subject to NPDES permits are provided in NCAC T15A2H.0106 (f).

There are no permitted dischargers located within the project study area or along any portion of the tributaries to the Little Tennessee River (DWQ 2003c). The nearest relevant permitted discharger is the Town of Franklin WWTP (NC0021547), a large municipal discharger, which is over 10 miles upstream of the project study area.

Nonpoint Source Discharges

Nonpoint Source (NPS) pollution is described as pollution contained in stormwater and snowmelt runoff from agricultural, urban, mined, and other lands (DWQ 1996). NPS pollution comes from diffuse sources in contrast to "point" source pollution, which is discharged through a pipe or outlet. Surface water as well as leachate to groundwater can be impacted by NPS pollution (DWQ 1996). The only NPS discharges observed within the project study area include stormwater runoff from the paved portions of Needmore Road and sedimentation from the unpaved portion of Needmore Road.

b. Surface Water Characteristics

There are 15 streams (43 stream segments) (**See Figure 7**) located within the project study area. These include the Little Tennessee River, four named streams and ten Unnamed Tributaries (UT). The project study area streams are relatively undisturbed, have little to no turbidity, and are known for their good water quality. The Little Tennessee River flows northwest through the project study area. The Little Tennessee River within the project study area is approximately 253 feet wide with substrate consisting of rock, cobble, and sand. Small rock outcrops and vegetated islands are found within the banks of the Little Tennessee River. Bird Branch, at the top of bank, is approximately 1.5 feet deep and 7.0 feet wide with a substrate consisting of rock, cobble, and sand. Tellico Creek, at the top of bank, is approximately 4.0 feet deep and 28.5 feet wide with areas of exposed cobble and sand bars. Ledbetter Branch, at the top of bank, is approximately 2.5 ft deep and 10.0 ft wide with a substrate consisting of sand and gravel. Loudermilk Creek, at the top of bank, is approximately 1.5 feet deep and 20.0 feet wide with a substrate consisting of rock and cobble. The majority of the UTs within the project study area are 1st order perennial mountain seeps with substrate consisting of rock and cobble. Characteristics of stream reaches within the project study area are provided in **Table 9 in Appendix C**. The number of stream segments (43) is greater than the number of actual streams (15), because most of the stream channels are broken by culverts under Needmore Road and both the Little Tennessee River and Bird Branch flow in and out of the project study area. Each individual stream has a numeric designation (1 through 15) and each individual segment has a letter sub-designation (*i.e.*, S4a through S4o).

As part of the Natural Resource Investigation, all surface waters were classified using the Natural Stream Channel Classification System (Rosgen 1996) and Cowardin Classification (Cowardin *et al*. 1979). The Natural Stream Channel Classification effort was a Level 1 classification, and consisted of a general description of channel type without detailed measurements.